

NORTH DAKOTA

Department of
HUMAN SERVICES

Advanced
Planning
Document

of the

Medicaid Management
Information System
Rewrite Project

Initial APD

November 14th, 2003
Revised December 2nd, 2003

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MEDICAID MANAGEMENT INFORMATION SYSTEM

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I. Summary of APD Updates

1. Initial APD – November 14th, 2003
 - Initial funding and activity approval.
2. Revision to initial APD – December 2, 2003
 - Updated four milestones to reflect the submission/approval of system replacement APD prior to the submission/approval of the system replacement RFP.
 - Increased Project Manager's time to 100%.
 - Removed all contingency dollars in the Budget section.

3.

II. Introduction Statement

During the 2003 Legislative Session, an appropriation was approved to allow the Medical Services and Information Technology Divisions of the North Dakota Department of Human Services to plan and prepare the necessary framework for procuring a new Medicaid Management Information System (MMIS) system. A total of \$1.6 million was appropriated based on a 90% federal match, with allocated amounts of \$160,000 state funds and \$1,440,000 federal funds.

This Advance Planning Document (APD) requests federal funds to cover the activities to plan and prepare for procuring a new Medicaid Management Information System (MMIS) system. During the course of planning, all options, which include releasing an RFP for a new MMIS system, will be evaluated. This APD includes milestones for the release of an RFP for a new MMIS system by January 1, 2005. In the event a different solution is selected, the APD will be updated accordingly.

Also, in January 2005, the North Dakota Legislature will be convening for its' biennial session. Securing funding for a new MMIS system will be a top priority for the Department of Human Services. In addition, we will periodically meet with the interim Legislative Information Technology committee to keep them informed of all planning activities.

The existing MMIS was implemented in the late seventies. This system poses problems with old technology and data integrity and needs to be replaced with 21st century technology. Additionally, the system has been modified numerous times to add new components and functionality. These changes have lengthened the useful life of existing system but have resulted in a patched up system, which is very difficult to maintain and keep running efficiently. Maintenance and enhancements to the MMIS application take longer and cost more. Problem resolution, coding and testing all take considerable more time than maintenance to other applications written in the last 10 years. The current backlog of over 140 change requests, some over 5 years old, is indicative of a serious problem.

The MMIS is run by the State of North Dakota and resides on the State's mainframe (IBM OS/390). North Dakota's Wide Area Network can be summarized as a Cisco Routed, ATM Network, where all central Department local area networks within the city of Bismarck are comprised of 10/100-switched Ethernet, connected via ATM's. There are eight programmers from Information Technology Division that take care of maintenance requests and enhancements to the MMIS system. One full time IT coordinator from the Department of Human Services, Division of Information Technology, coordinates the correction of MMIS system problems and coordinates MMIS system enhancements. The operational costs for calendar year 2002 was \$2,794,910.

III. Scope

With the use of the current MMIS system, it is difficult to manage on-going operating expenses. Several factors including outdated design architecture, concentration on batch processing, and unstructured/inefficient program code all contribute to rising operating expenses. The State Information Technology Department (ITD) cannot guarantee that operational costs will decrease with a newer system. However, we expect to be able to 'manage' costs via the capability of monitoring, tuning the newer databases and applications, and faster turnaround on maintenance requests.

The age and architecture of the current MMIS system is also problematic for daily use and is not conducive to incorporating new technology. A case in point would be the recent rollout of the 4010A HIPAA transactions, which has weakened the stability of the MMIS and has caused innumerable problems with processing claims. The age and structure of the current system results in new difficulties each time a change is made to the existing code. This results in increased costs for system operations and maintenance, untimely processing of claims, and inaccurate payments. We recognize that there will be additional HIPAA transactions and code sets that will have to be designed and implemented. Adding these requirements to the current system will more than likely result in additional costs and resources required for daily use of the system. As we are considering the best approach for MMIS replacement, we are seeking a solution that will qualify for CMS federal certification and will be fully HIPAA compliant. In addition, the solution would allow us to be more responsive to future changing business needs such as HIPAA transactions and code set changes.

Moving to newer technologies would provide more flexibility and quicker implementation of existing and future compliance issues. Applications designed using modular 'open-interface' concepts allows for better integration with hardware and 'off the shelf' software solutions.

A newer architecture would also facilitate providers being able to file claims electronically. This would allow for a more efficient and accurate payment process through real time transactions and auto-adjudication of claims. In addition, providers would have the capability to check the status of claims using real time access.

The State Information Technology Department (ITD) has difficulty staffing legacy technology (COBOL, Natural, Adabas, VSAM, and Sequential Files). Most of these languages and concepts are not part of college and university curriculums. ITD needs to invest several months of training/mentoring to bring a developer to a competence level in these technologies. In addition, retaining knowledgeable COBOL developers is difficult because of opportunities for career growth and advancement into new languages and technologies. Finally, many of the ITD staff that lead or work on the MMIS team are nearing retirement. Replacing their knowledge of this system's architecture will not be possible. A system with new technologies would allow us to more easily maintain staff and avoid the costs with continuous training of programmers due to lack of career opportunities.

The MMIS application is not structured to take advantage of newer technologies used by the Departments' divisions, which operate eligibility and other economic assistance programs. The

program code used to interface between these applications and MMIS does not allow optimal efficiency thus causing longer running, more expensive production runs.

The sequential file structure of the MMIS application does not lend well to ad-hoc reporting tools like Crystal Reports. Most MMIS ad-hoc reports require a computer program or a download of large data blocks into spreadsheets where conversion, parsing and data 'clean-up' are required. Currently we use Medstat's dataprobe system to run reports, however the data is only updated once a month. Having access to real-time data is not possible at this time. In addition, the expenditures for the Medstat contract are currently \$1,000,000 for the biennium. Having a system that allows for on-site data storage would allow us to save this amount.

Finally, within the last year the state auditors' office has indicated that duplicate payment problems are occurring and that payment accuracy is in jeopardy. Addressing these issues within the current MMIS is not feasible due to the structure of the system.

Based on the significant business analysis that needs to be done with this project, it is most feasible to involve an outside contractor, which specializes in this activity. The role of the outside contractor is:

- Spearhead the analysis process.
- Assess the MMIS as it is at present.
- Document all current and future business needs.
- Assist DHS with evaluating each system option.
- Develop a Cost Benefit Analysis to meet CMS Requirements.
- Develop a RFP, which will include a requirements analysis, for purchase or development of a new system.

The following activities will occur during planning:

- Establish the project office
- Establish the Executive Steering committee with roles and responsibilities
- Establish the core team with roles and responsibilities
- Approval of the planning APD.
- Approval of RFP in order to acquire a contractor.
- Vendor demonstrations.
- Assess North Dakota's current MMIS.
- The contractor is brought onto the MMIS Replacement project to conduct requirements analysis and assessment of the department's Medicaid related functional and business needs and practices.
- Assess the Medicaid systems having recently been developed for use in other states and territories of the USA, where the Medicaid program business needs and practices are similar in nature to those of North Dakota, specifically looking to identify best practices, strategies and approaches which could be utilized successfully in North Dakota.
- Conduct on-site reviews of potential systems.
- Examine the feasibility of, and benefits and costs related to, the outsourcing of North Dakota's MMIS, either in whole or in part.

- Examine the feasibility of, and benefits and costs related to, developing a system utilizing the State's Information Technology Department.
- Prepare a report presenting alternatives and a recommended design, development and implementation approach.

IV. Preliminary Cost/Benefit

The current MMIS does not lend itself to ease of maintenance or to efficiency of processing, nor does it allow North Dakota to take advantage of the numerous technological developments, which have occurred within the computer and Medicaid industries since it was developed, nearly 25 years ago. In addition, North Dakota faces potential financial penalties if federally mandated modifications are not implemented within required time frames. Incorrect claim and capitation payments, and encounter tracking could result if the system does not accurately reflect State and Federal program policies.

The benefits obtained through replacement and/or modernization and enhancement of the current MMIS are expected to be numerous. The applicable HIPAA requirements will be achieved, and the new system will result in more efficient processing and maintenance capabilities, increased accuracy in payments being made, improvement in reporting, monitoring and projection of usage and claims, and an increased level of service to our client population and the providers who serve them.

A key deliverable resulting from the Requirements Analysis, will be the identification of the feasibility and cost/benefit analysis of replacement.

Upon receipt of the contractor's design, development and implementation recommendation (which will include the cost/benefit analysis), DHS will evaluate the findings and present a recommendation to the North Dakota Legislature on moving forward with the MMIS Project. Prior to moving into system replacement, the APD will be amended and submitted to CMS for review and approval.

The estimated cost of a new MMIS system is \$25,000,000 to \$30,000,000.

As outlined in the Scope description, a new MMIS solution would yield savings to the Department in many areas due to a reduction in operating expenses, maintenance costs, and staff time. These benefits include:

- Process claims more efficiently
- Less risk of inability to pay providers
- Reduce temporary claims staff
- Savings to providers because of cash flow, and staff time used to track Medicaid payments
- Ability to add and enforce additional business rules.
- Providers will have real-time access to claim information
- More responsive to future HIPAA transactions; code sets and transactions can be implemented more quickly.
- Reduce printing and postage for Medical Services
- Reduce the number of system problems; which will reduce system maintenance expenses
- When enhancements or maintenance are necessary, the changes can be implemented more quickly.
- Reduce staff costs and backlog of paper claims.

V. Milestones

Date	Milestone
November 14, 2003	Advance Planning Document submitted to CMS for approval
November 21, 2003	Submit Business Analysis RFP and Evaluation Plan to CMS for approval
November 28, 2003	Advance Planning Document approved by CMS
December 11, 2003	Business analysis RFP and Evaluation Plan approved by CMS
December 12, 2003	Business Analysis RFP released
January 23, 2004	Select Contractor for Business analysis RFP
February, 2004	Site visits of Systems (4 site visits by 3 persons)
April 15, 2004	Submit Requirements analysis to CMS for approval
May 27, 2004	Requirements analysis approved by CMS
November 26, 2004	Submit system replacement Advance Planning Document to CMS for approval
December 29, 2004	System replacement Advance Planning Document approved by CMS
January 2, 2005	System replacement RFP released
January 14, 2005	Submit system design evaluation plan to CMS for approval
January 28, 2005	System design evaluation plan approved by CMS
February 15, 2005	System replacement bidders conference
May 2, 2005	State Legislature Grants Appropriation
May 5, 2005	Submit system replacement RFP to CMS for approval
June 6, 2005	System replacement RFP approved by CMS
June 14, 2005	Submit vendor contract to CMS for approval
June 28, 2005	Vendor contract approved by CMS
June 30, 2005	Vendor Award
July 1, 2005	MMIS replacement project begins

VI. Resources

Resource	Role in Project	Division	% Time
Dave Zentner	Executive Committee	Medical Services	<5%
Roger Hertz	Executive Committee	DoIT	<5%
Karalee Adam	Executive Committee	DoIT	<5%
Mike Fisher	Project Manager	DoIT	100%
Becky Blees	Business Analyst	DoIT	80%
Maggie Anderson	Business Lead	Medical Services	20%
Erik Elkins	Team member	Medical Services	75%
Tom Solberg	Team member	Medical Services	50%
Dave Skalsky	Team member	Medical Services	50%
Cherie Kraft	Team member	Medical Services	50%
<to be determined>	Business Analyst	ITD	100%
<to be determined>	Analyst	Contractor	100%

An Executive Committee of senior management will be given periodic updates on the status of the project. They will participate in decision-making and provide senior level support to the project manager.

VII. Proposed Budget

The State of North Dakota is requesting 90% FFP for all planning activities. The budget for the planning of the MMIS Replacement project is estimated as follows and includes projected costs for both State and Contractor staff.

Categories	Total costs	State Funds 10%	Federal Funds 90%
State staff salaries	\$ 579,000	\$ 57,900	521,100.00
Contractor	\$ 800,000	\$ 80,000	720,000.00
Equipment and supplies	\$ 7,500	\$ 750	6,750.00
Site visits	\$ 25,000	\$ 2,500	22,500.00
Total Project Cost	\$ 1,411,500	\$ 141,150	1,270,350.00

VIII. Statement of Length of Benefit

DHS anticipates that a new MMIS system would be implemented in 2007 with a useful life of 10 to 15 years.